

# A Systematic Review: How Is Urban Vulnerability in Fragmented European Cities Measured?

Maria Belén Vázquez Brage

Department of Sociology, University of A Coruña, Spain

**Correspondence:** Belén Vázquez (bvazquez1@udc.es)

**Submitted:** 13 April 2024 **Accepted:** 25 July 2024 **Published:** 16 September 2024

**Issue:** This article is part of the issue “Neighborhood Residents in Vulnerable Circumstances: Crisis, Stress, and Coping Mechanisms” edited by Peer Smets (Vrije Universiteit Amsterdam) and Pekka Tuominen (University of Helsinki), fully open access at <https://doi.org/10.17645/si.i405>

## Abstract

Urban vulnerability defines a situation of socio-spatial fragility that precedes exclusion and generates a growing social fragmentation in European cities. The psychosocial and multidimensional nature of urban vulnerability determines the interaction among complex socioeconomic, sociodemographic, residential, and subjective variables. The main objective of the article is to explore the comprehensive treatment of this concept within the European framework. A systematic review of the literature allowed for the analysis of over 190 published articles drawn from the Web of Science and Scopus databases from 2002 to 2024. The systematic review is grouped into three main areas: (a) theoretical support for the concept and official variables used for measuring these, (b) classification of the articles reviewed into thematic categories, and (c) identification of changes in the conceptualization and measurement of urban vulnerability. Finally, based on the reflection and review undertaken, this article proposes a conceptual basis and a battery of indicators of urban vulnerability, all of which refer to common areas of vulnerability within the European context. In particular, this proposal includes a new approach for conceptualizing and measuring urban vulnerability based on the results of this subjective review. The findings of this comparative effort form the basis for developing a systematic approach to measuring this concept key to the area of territorial sciences within the European context.

## Keywords

European Union; social exclusion; systematic review; urban vulnerability; vulnerability indicators

## 1. Introduction

The concept of urban vulnerability serves as an instrument to name, raise awareness of, and report the problematic socioeconomic situation that emerges in urban spaces and provides information about the

symptoms that act as indicators of exclusion and social segregation. Moreover, the concept of urban vulnerability also functions as a diagnostic tool for research in the area of public policy that aims to identify scenarios of social fragmentation and exclusion in urban spaces. The precision and rigor with which the notion of urban vulnerability is constituted will, therefore, be fundamental in capturing the symptoms and causes of the emerging phenomenon of the fragmented city (Alves, 2017; Bellet Sanfeliu, 2021; García-Araque & García-Cuesta, 2020; Piasek et al., 2022).

This article aims to provide an in-depth study of the concept of urban vulnerability, including the criteria used in European Union countries to diagnose the phenomenon in an attempt to highlight the multiplicity of methods used to define this concept as well as any possible limitations of the current literature. The concept of vulnerability is multifaceted, which makes it extremely difficult to operationalize and evaluate (Alguacil Gómez et al., 2014; Conway & Konvitz, 2000; García-Almirall et al., 2023). The indicators in use are often employed to capture vulnerable areas, offering a simplistic image of urban reality. Consequently, it is necessary to broaden the interpretative scope and to further diversify the explanatory models as well as the subjective dimension applied in evaluating why neighborhoods deteriorate or why they remain vulnerable across all of Europe (Alguacil Gómez et al., 2014; Alves, 2017; Antón-Alonso & Cruz-Gómez, 2022; Davidson et al., 2013; Schnur, 2005; Van Dam & Raeymaeckers, 2017; Visser, 2020).

## 2. Method: A Systematic Review

The European Union calls for following a common path that prevents and responds to urban vulnerability (Commission of the European Communities, 1997, 2000; European Commission, 2016). The strategy employed to acquire and organize knowledge on this concept has been to develop a process for a systematic review of the literature (Kitchenham, 2004, p. 5) which fills a gap in the existing body of research on this topic, as no work along these lines has yet been published. This process involves formulating an advanced research query to guide the selection of articles. This method differs from traditional narrative reviews because it adopts a focus that is both transparent and can be replicated (Moher et al., 2009), by applying a strategy based on a systematic search using predefined inclusion and exclusion criteria.

Therefore, the aim is to synthesize existing research in order to optimize the knowledge base of the phenomenon in question and to inform future research needs. The synthesis consists of extracting the information analyzed based on the identification and grouping of the most significant approaches related to urban vulnerability.

### 2.1. Sample: Inclusion and Exclusion Criteria

Two scientific literature databases, Scopus and Web of Science, were selected and filtering criteria were applied to them by formulating an advanced search query.

Urban vulnerability is shaped by the particular idiosyncrasies of the sociocultural context in which it occurs. Contextual conditions define the specific nature of the vulnerability in question. Therefore, the theoretical construct used to interpret urban vulnerability is conditioned by the situation of the countries in which it takes place (Valdés Gázquez, 2021). For this reason, it is considered that a similar pattern of influences can apply when studying European cities and the explanations for and responses to this phenomenon can follow

common criteria. The sample highlights studies that focus on a European context and leaves out more extensive international studies on urban vulnerability to simplify the analysis of the situation and allow for more cohesive research.

The European proposal for the study of urban vulnerability is limited to the specific urban area identified as a neighborhood (Conway & Konvitz, 2000; Laparra & Pérez Eransus, 2008). The structured search for the systematic review of the literature includes terms such as “vulnerable or deprived neighborhoods.” Neighborhoods are, after all, the physical spaces where social vulnerability is implemented (Castel, 1995). Neighborhoods are the areas where a combination of problems related to economic deprivation and socio-spatial interactions that significantly affect the situation of vulnerability are concentrated.

According to Pérez de Armiño (2000), the origin of the concept of vulnerability derives from an interest in analyzing certain natural disasters-droughts, hurricanes, and earthquakes-and the problems related to the process of recovery. In the 1980s, the importance of natural catastrophes as drivers of disasters was recognized, but another factor was also identified as a key factor: “The socioeconomic structures and processes of inequality were the causes underlying vulnerability” (Pérez de Armiño, 2000, p. 2). This type of vulnerability is structural and is determined by how a specific social system itself is organized. This article focuses on this type of vulnerability where how human as well as material resources are distributed, existing formal and informal rules, and the ideology that legitimizes social action are fundamental factors (Giddens, 1984). Therefore, to avoid any interference of research dealing with environmental issues, vulnerability exclusion criteria were established to exclude studies on the environment or topics associated with natural catastrophes such as natural, climate, seismic, ground, or energy (see Table 1).

Given that the purpose of this research is to optimize the process of identifying the reality of urban vulnerability and the discrimination between the symptoms or effects of neighborhood deprivation and the descriptive or explanatory variables behind the phenomenon (Alves, 2017; Andersen, 2002; Antón-Alonso & Cruz-Gómez, 2022; Davidson et al., 2013; Schnur, 2005; Van Dam & Raeymaeckers, 2017; Visser, 2020), this work excludes documents that deal with aspects of vulnerability that are irrelevant in this case. For this reason, the following terms are excluded: health, school, drugs, violence, and the field of medicine. This

**Table 1.** Advanced search query.

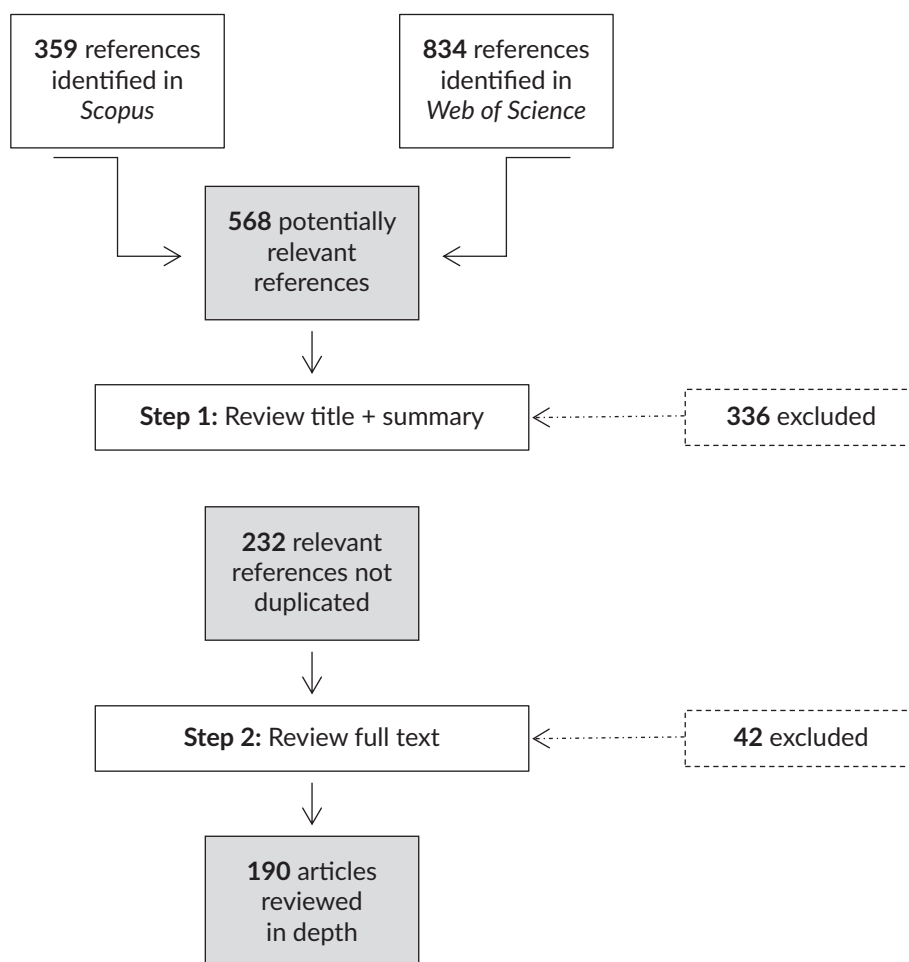
		AND NOT
OR	urban vulnerability	climate*
		natural* disaster*
		seismic*
		flood*
	vulnerable* neighborhood	energy*
		health*
		school*
		crime*
	deprived* neighborhood	violence*
		drug*
		environment
		medicine
		others

**Note:** The asterisk is a logical operator used to replace characters of a specific word when performing an advanced search.

decision is intended to avoid studies that deal exclusively with vulnerable groups, ignoring the urban aspect of the phenomenon. Urban vulnerability crosses and converges in two specific areas: sociology and urban planning. These two areas are established and delimited as the main fields of the research (see Table 1).

The sample of articles obtained from the search query includes research papers dating from 2002 to 2024. Once a first search was performed, all duplicate documents or those considered irrelevant for this study were filtered out at different stages of the process. Figure 1 shows the results of the filtering process and the number of documents in the sample that have been eliminated at different stages of the review.

The systematic review was completed with the inclusion of documents that rely on the official indicators being used to measure urban vulnerability in Europe (Agence Nationale de la Cohésion des Territoires, 2022; CATI-GE et al., 2020; Government of Denmark, 2024; Istat, 2020; Lisboa Câmara Municipal, 2020; Mandemakers et al., 2021; Mclennan et al., 2019; MITMA & Agenda Urbana, 2021; Northern Ireland Statistics and Research Agency, 2017; Pobal Government Supporting Communities, 2022; Scottish Government, 2024; Senatsverwaltung für Stadtentwicklung und Wohnen, 2019; Vanderमotten et al., 2015; Welsh Government, 2024; World Bank, 2014).



**Figure 1.** Stages in the systematic review process.

The information obtained from the study sample forms the basis for a conceptual definition of urban vulnerability and highlights three main approaches: snapshots, dynamics, and mechanisms of urban vulnerability.

### 3. The Concept of Urban Vulnerability in the European Literature

From the sociological point of view, in addition to high population density, a complex social structure, and a concentration of advanced and specialized production services, the term urban refers to the social action that arises in a physical-spatial unit in juxtaposition with a specific personality that is shaped and, at the same time, shapes interactions and social exchanges that take on a utilitarian character in this space (Park, 1915; Sassen, 2001; Wirth, 1938). From this perspective of the urban and utilitarian nature of a given urban space, a functional city that is well-organized and well-ordered is supported by the principle of equity or redistributive social justice that acts as the fundamental regulator of integration and is the main source of social cohesion (Commission of the European Communities, 1997). The city should guarantee universal accessibility to all spheres of vital action and participation, consumption, and production. To achieve full integration, the community needs to work towards building an interdependent motivational fabric that can satisfy the basic needs of the residents: relational, psychological, material, cultural, etc. It is the city's obligation to provide its members with the resources at its disposal, and at the same time, it is responsible for also providing the means of access to these resources. In short, the city must move beyond the utilitarian and offer quality of life, as well as a sense of belonging and identity (Commission of the European Communities, 1997; Council of the European Union, 2008; European Commission, 2016, 2020).

In this way, characteristics that identify what is urban are connected to the concept of urban vulnerability. When society is incapable of satisfying the needs of all its members, the idea of social justice that legitimizes social cohesion is blurred. Social interaction becomes asymmetrical, and the concept of reciprocity breaks down (Simmel, 1972). This leads to a process of production of devaluing images (Almeida, 2021) that seeks to undervalue and isolate people in conditions of vulnerability, making them responsible for their situation. This, in turn, produces isolation in terms of spatial accommodation that generates the loss of contact with the main sectors of society and a situation of social dissociation (Castel, 1995). The unemployed, in particular, suffer a process of disaffiliation from the social networks that link them to society and the dominant structures that give these meaning: identity, sense of belonging, and perception of social utility. Being outside of society does not mean a total absence of social relations but implies a specific way of relating to the environment based on subordination and the lack of emotional ties and participation in community projects, all of which are the essence of cohesion (Castel, 1995).

For Castel (1995) this is the new social and urban issue associated with a physical-spatial correlation within the context of the city. The author identifies the neighborhood as the physical space where the causes of social disintegration and disaffiliation take shape and the space that perpetuates them. It is in the neighborhood where the relationships between precarious work and social instability are determined. At the same time, Hernández Aja (2007) applies the notion of social vulnerability to the physical space the city occupies and expresses urban vulnerability in terms of discomfort and deterioration. The vulnerable neighborhood includes a socially disadvantaged population due to multiple factors: high levels of poverty, low educational achievement, low rates of labor force participation, a high number of single-parent families, higher incidence of health problems, inadequate access to services, households lacking means of

transportation, low participation in democratic and community processes, and high incidence of vandalism and crime (Conway & Konvitz, 2000). These create barriers for residents seeking employment, undermining their life opportunities and denying them the exercise of rights normally taken for granted in other parts of the city (Conway & Konvitz, 2000).

The systematic review of the articles selected reveals that urban vulnerability is understood to be a circular situation (Andersen, 2002; Bellet Sanfeliu, 2021; Miltenburg & Van de Werfhorst, 2017) arising in a physical space of the city with certain reputational characteristics (Almeida, 2021; McGuinness et al., 2012; Permentier et al., 2011) that are capable of attracting and concentrating a population group characterized by economic weakness (Madanipour, 2004). The lack of income has a parallel consequence beyond the economic dimension that translates into a polyhedral situation of social disadvantage consisting of four realities (Hernández Aja et al., 2015): economic (absence of work or precarious employment); sociodemographic (population with a low level of education); residential (housing and deteriorated living environments), and subjective (thought and behavior patterns of hopelessness, and frustration). These facets are self-powered through interactive (Bektaş & Taşan-Kok, 2020; Nieuwenhuis et al., 2017; Visser et al., 2015) and social status mechanisms that condition internal and external relations in the urban space (Andersen, 2002; Anguelovski et al., 2018; Bellet Sanfeliu, 2021; Hughes & Lupton, 2021; Jivraj & Alao, 2023; L'Horty et al., 2019).

To achieve a complete understanding of urban vulnerability, the next section describes the reality it shapes through snapshots, mechanisms or the causes that produce and reproduce it, and the dynamics involved including the forces that modulate the relationships generated in that particular environment.

#### 4. Snapshots, Dynamics, and Mechanisms of Urban Vulnerability

Following the analysis of the papers cited, three approaches stand out. These make up and explain the condition of urban vulnerability from different complementary angles. While each of these has been considered and even highlighted separately by several authors, they have never been studied in connection with each other. These approaches are indicated below:

1. Snapshots: studies that focus on the knowledge of the attributes or symptoms of urban vulnerability to identify the phenomenon and its degree of intensity more effectively.
2. Dynamics: urban vulnerability is understood from multiple and changing perspectives, essentially as a dynamic circumstance (Castel, 1995). Vulnerability is understood as a timeline, and the aim is to trace the precedents and the set of trajectories taken by the vulnerable social group. The mobility and evolution of the composition of the residents and the influence of the neighborhood on the housing choices of individuals are analyzed.
3. Mechanisms: the study of urban vulnerability, which includes qualitative research of the mechanisms that trigger contraction, expansion, or perpetuation of the space of social vulnerability is considered fundamental. These studies highlight the psychosocial and subjective aspects of urban vulnerability, the perceptions that guide and anticipate behavior that promotes physical and social revitalization of vulnerable spaces or reinforces its chronification.

This conceptual triad of urban vulnerability is explained below in more detail.

#### 4.1. Snapshot

Several papers seek to classify neighborhoods into different typologies, given the need to find similar patterns of characteristics to identify degrees or differences of vulnerability. In this sense, there are numerous studies that present snapshots and develop new indicators by making experimental proposals aimed at refining the identification of the different dimensions of urban vulnerability in neighborhoods.

These papers include data on the demographic profiles and physical characteristics of urban areas at risk, and branch out into two interrelated planes: an objective one, based on measurable factors such as unemployment and educational levels, health indicators, or immigration rates (Antón-Alonso & Cruz-Gómez, 2022; Echebarria et al., 2023; García-Almirall et al., 2023; Pobal Government Supporting Communities, 2022; Scottish Government, 2024); and a subjective one, focused on capturing qualitative information obtained through opinions and feelings expressed by citizens based on their relative perceptions of reality (Hill et al., 2014; Mandemakers et al., 2021; MITMA & Agenda Urbana, 2021; Permentier et al., 2011; Vanderमotten et al., 2015). The dimensions of urban vulnerability obtained from instruments used by official sources of some European countries as well as those proposed by the sample of papers analyzed are discussed in detail below:

1. The *economic dimension* includes data on income and employment, poverty level measures, labor force participation rate, receipt of subsidies, percentage of unskilled jobs, types of employment contracts, and types of occupations (MITMA & Agenda Urbana, 2021).
2. The *educational dimension* examines information on the educational attainment and school absenteeism of residents. This takes into account the percentage distribution of educational levels of residents: primary, secondary, and university/tertiary education (Lisboa Câmara Municipal, 2020).
3. In the *sociodemographic dimension* key variables are broken down into three main factors associated with life cycle stages, household composition (single-parent families and large families) and immigration (Boje-Kovacs et al., 2021).
4. The *health dimension* deals with the incidence of health problems and disability related to drug and alcohol use (McLennan et al., 2019; Scottish Government, 2024; Welsh Government, 2024).
5. The *living environment dimension* refers to the quality and quantity of services and public leisure space available (basic services, community spaces, green areas, and pollution), and information on geographic barriers or the level of isolation in relation to the city (access to, distance from, and travel time to resources and services; existence of public and private means of transportation; see McLennan et al., 2019).
6. In the *housing dimension* data is collected on housing quality, typology, tenure regime, overcrowding rate, and vacancy rate (García-Almirall et al., 2023).
7. The *social cohesion/participation dimension* refers to the degree of participation of residents in community and democratic processes which involves aspects such as trust, attachment, and community and social identity. In addition, information is also collected on the degree of delinquency (incidence of vandalism and crime; see Agger & Jensen, 2015; Al Sader et al., 2019; Antón-Alonso & Cruz-Gómez, 2022; Baumont & Guillaín, 2016; Bektaş & Taşan-Kok, 2020; Deas & Doyle, 2013; L'Horty et al., 2019; Schnur, 2005).
8. In the *subjective dimension*, the value, attitudes, and perceptions of the population group influence their adaptation to the environment and their expectations of social mobility. They influence the pace and



degree of conformity or act as a driving force within the social fabric of the urban space. In this case, we find indicators designed to extract information on the perception of safety and discomfort in the residential environment—noise, pollution, and scarcity of public spaces. This aspect is, in fact, the most reiterated issue in the subjective domain (Alves, 2017; Andersen, 2002; Davidson et al., 2013; Falahat & Madanipour, 2019; Hill et al., 2014; Permentier et al., 2011; Van der Land & Doff, 2010).

Table 2 shows the existence of official indicators for measuring urban vulnerability in each of the dimensions discussed above, as well as their distribution in different EU countries. The selection of the countries shown in Table 2 has been established considering that these countries show a clear political orientation in favor of the elimination of social barriers, with a strong and significant commitment to the search for knowledge and diagnosis of the phenomenon of urban vulnerability. This is evidenced by the degree of complexity and quality of the tools and indicators they have developed (for example, the development of social observatories dealing with urban vulnerability). As a special feature, the United Kingdom is included, given its significant influence as a relevant member of the EU during the period covered by this literature review.

The most studied dimensions are economic, educational, and housing. Other dimensions have received less official treatment, as in the case of the subjective dimension and social cohesion. Both dimensions are identified as the most vaguely defined and least contemplated domains at the operational level in Europe. However, despite this gap in terms of official data, they are widely considered in the literature (Falahat & Madanipour, 2019; Miltenburg & Van de Werfhorst, 2017; Nieuwenhuis et al., 2017; Permentier et al., 2011; Van der Land & Doff, 2010; Visser, 2020).

An exception to the importance placed on the subjective dimension is indirectly reflected in studies by Eurostat (2013). This organization incorporates, for the first time, a combination of subjective indicators (perception of quality of life, presence of foreigners, security, etc.) together with objective indicators (educational level, occupation, state of health or family and economic situation) to measure quality of life in Europe.

Regarding social cohesion and citizen participation, Germany and the Netherlands measure this dimension using objective data such as residential stability, diversity in terms of life cycle stages, mutation rate (transfers of people within a radius of 100 meters), and population density. Another group of countries—Northern Ireland, England, Wales, and Scotland—describe this dimension using objective data on safety, crime, public disorder, and delinquency.

The habitability tool developed in the Netherlands deserves special mention for its originality and methodological richness due to its analysis of quality of life since it avoids recording data that reinforces the stigmatization of residents in these types of areas. This tool tries to estimate the development process of districts and neighborhoods on a biannual basis. The data obtained can signal potential deterioration in the quality of life.



**Table 2.** Dimensions of vulnerability per country in the EU and the UK along official indicators used by each (x).

EU Countries	Dimensions of Urban Vulnerability								
	Economic	Educational	Sociodemographic	Health	Housing	Living environment	Cohesion/citizen participation	Subjective	Institutions and tools
Belgium	x	x	x	—	x	—	—	x	SPP Integration Sociale Centre de Analyse dynamique des quartiers en difficulte dans les régions urbaines belges
Denmark	x	x	x	—	—	—	—	—	Transport-, Bygnings- og Boligministeriet Ghettoliste
France	x	x	x	—	x	—	—	x	Agence Nationale de la Cohesion des Territoires, INSEE Observatoire Nationale de la Politique de la Ville
Germany	x	—	x	—	x	x	x	—	Senatsverwaltung für Stadtentwicklung und Wohnen Monitoring Soziale Stadtentwicklung
Ireland	x	x	x	—	x	—	—	—	Irish Government Pobal HP Deprivation Index
Italy	x	x	x	—	x	—	—	—	Istat Indice di vulnerabilità sociale e materiale
Netherlands	—	—	—	—	x	x	x	x	Ministerie van Binnenlandse Zaken en Koninkrijksrelaties Leefbaarometer
Portugal	x	x	x	—	x	x	—	x	Câmara Municipal de Lisboa Bairros e Zonas de Intervenção Prioritária de Lisboa (BIP/ZIP)

**Table 2.** (Cont.) Dimensions of vulnerability per country in the EU and the UK along official indicators used by each (x).

EU Countries	Dimensions of Urban Vulnerability								Institutions and tools
	Economic	Educational	Sociodemographic	Health	Housing	Living environment	Cohesion/citizen participation	Subjective	
Romania	x	x	x	x	x	—	—	—	World Bank <i>The Atlas of Urban Marginalized Areas in Romania</i>
Spain	x	x	x	—	x	—	—	x	Ministerio de Transportes, Movilidad y Agenda Urbana <i>Atlas de la Vulnerabilidad Urbana</i>
Switzerland	x	x	x	x	x	x	x	—	Département de la cohésion sociale (DCS) CATI-GE
<b>UK: Other Countries of Europe</b>									
England	x	x	x	x	x	x	x	—	Ministry of Housing, Communities and Local Government <i>English Index of Multiple Deprivation (IMD)</i>
Northern Ireland	x	x	—	x	x	x	x	—	Northern Ireland Statistics and Research Agency <i>Northern Ireland Multiple Deprivation Measure (NIMDM)</i>
Scotland	x	x	—	x	x	x	x	—	Scottish Government <i>Scottish Index of Multiple Deprivation (SIMD)</i>
Wales	x	x	—	x	x	x	x	—	Welsh Government <i>Welsh Index of Multiple Deprivation (WIMD)</i>

## 4.2. Dynamics

Other types of studies reviewed seek to examine neighborhood dynamics by observing residential mobility i.e., household entry or exit, demographic turnover, and processes of urban densification, gentrification, and depopulation (Bailey et al., 2017; Fransham, 2019; Hughes & Lupton, 2021; Robson et al., 2008; Van Ham et al., 2013). These dynamics have a strong impact on neighborhood social networks and access to information about job opportunities.

Longitudinal studies on the social evolution of disadvantaged neighborhoods (Boje-Kovacs et al., 2021) have exposed a series of results that point to employment as a determinant of mobility and persistent vulnerability in the urban fabric (Holden & Frankal, 2012). Regarding the social composition by type of occupations, extremely vulnerable neighborhoods present a lower number of residents employed as managers and professionals, are less likely to experience a drop in the number of working-class residents, and are host to more members from outside the EU (Antón-Alonso & Porcel, 2023).

Other studies seek to understand the causes underlying neighborhood choice. These types of studies analyze the relationship between vulnerability and individual characteristics including age, gender, class, and ethnicity as well as autobiographical characteristics of the residents: original social context, and parents' socioeconomic status (Nieuwenhuis et al., 2017; Permentier et al., 2011; Visser, 2020; Zuccotti, 2019). Identity construction in vulnerable neighborhoods characterized by diversity is complex and, as a result, this disengagement reinforces a sense of disadvantage. This feeling is a source of psychological stress and the perception of injustice (Nieuwenhuis et al., 2017). This may lead to psychosocial and behavioral problems and negative attitudes arising from feelings of inferiority and shame, loss of self-esteem, and dissatisfaction (Galster, 2012; Honneth, 2007; McCulloch, 2001; Oberwittler, 2007).

## 4.3. Mechanisms

This section discusses the causes or mechanisms underlying the effect neighborhoods have on residents. Following Galster (2012), these are grouped into four different categories.

### 4.3.1. The Social-Interactive Mechanism

According to the literature, social processes derived from social-interactive mechanisms have a negative impact on a neighborhood's capacity for degradation and the chronification of vulnerability. This situation can give rise to a ghetto culture. The social processes at work in the vulnerable urban environment discourage social aspirations and reinforce social stratification and the belief that upward social mobility is impossible or undesirable and, ultimately, inhibit the potential for innovation (Dacombe, 2013).

The variables that have a direct impact on these processes are the social composition of the neighborhood, its sociodemographic profile, and its potential to facilitate cooperative flows and solid social networks that crystallize into group efficacy. The nexus between residents is determined by social trust and place attachment (Li et al., 2005). Vulnerable neighborhoods connect residents whose economic position is weak but are socially, politically, and culturally heterogeneous (Madanipour, 2004).

Contrary to the contact hypothesis that holds that heterogeneity is beneficial in terms of opportunities and protection against stigmatization (Allport, 1954; Peters et al., 2018; Pettigrew, 1998), other studies claim that diversity does not buffer vulnerability (Clark & Drinkwater, 2002; Jivraj & Alao, 2023). In fact, in certain cases, contact may reaffirm prejudice and generate conflict (Blumer, 1958; Bobo & Hutchings, 1996).

Likewise, the perception of heterogeneity generates symbolic boundaries (Albeda et al., 2018) that impact everyday behavior (Deas & Doyle, 2013; Van der Land & Doff, 2010), giving rise to negative interactions that reinforce vulnerability such as social avoidance, prejudice, and rootlessness (Bellet Sanfeliu, 2021; Boldú Hernández & Domínguez-Mujica, 2018; Van Laner, 2021).

#### 4.3.2. Environmental Mechanisms

This refers to the effects of exposure to deteriorated physical infrastructures and polluting factors, scarce or inefficient public services, scarcity and/or deterioration of public spaces and green spaces, low housing quality, environmental and noise pollution, etc. (MITMA & Agenda Urbana, 2021). These physical elements influence the perceived reputation of the vulnerable neighborhood. In this sense, a deteriorated image diminishes the possibilities of private investment and catalyzing the creation of businesses and jobs, and simultaneously favors the attraction of poor populations looking for cheap places to live (Antón-Alonso & Porcel, 2023). This deterioration coupled with a situation of neglect on the part of both private and public sectors influences the behavior of residents, who become infected by this neglect and respond through behaviors that undermine the sense of neighborhood or community attachment (Madanipour, 2004).

In the same way, the scarcity or deterioration of public spaces also hinders social participation, cohesion, and the sense of identification with one's environment, etc. Public spaces are markers of neighborhood health and vulnerability as evidence indicates they improve physical health and promote socialization, thereby strengthening place identity (Hickman, 2012).

#### 4.3.3. Geographical-Spatial Dimensions

The location of the neighborhood with respect to the city center or to the nucleus where the main resources are located clearly conditions accessibility to employment opportunities. The spatial mismatch hypothesis states that the distance from the place of residence to the workplace reduces the chances of finding employment, and increases the risk of urban vulnerability (Gobillon et al., 2011; Hellerstein & Neumark, 2012). Distance acts as a signal of occupational reliability, indicating that residents who commute from more distant neighborhoods are associated with lower productivity, or present higher rates of absenteeism and tardiness to work (L'Horty et al., 2019; Van Ommeren & Gutiérrez-i-Puigarnau, 2011).

The neighborhood's socioeconomic status is considered a geographical marker that also affects chronification of vulnerability. It generates uncertainty regarding the productive skills of residents from vulnerable neighborhoods (Bunel et al., 2016; Carlsson et al., 2018). The status of the vulnerable neighborhood is determined by three processes (Almeida, 2021): segregation, building physical and symbolic barriers, and the construction of a devaluing image. In this sense, this image along with other neighborhood problems influence residents' self-understanding (Andersen, 2010), activating a process of self-stigmatization that inhibits aspirations and lowers self-confidence (McGuinness et al., 2012). Negative

images contribute to creating an inactive social environment, a lower propensity towards active job search, and also lower residents' inclination towards participation in social life (Costa Pinho, 2000).

#### 4.3.4. Institutional Mechanisms

This category pays particular attention to networks of participatory governance and the concept of entrepreneurial citizenship: co-production, civic enterprise, and self-organization through social entrepreneurship (Parés et al., 2012). The literature also highlights what is referred to as the bottom-up approach to collaboration which takes place in urban interventions as a result of neighborhood regeneration, in which case taking into account residents' opinions is considered essential (Jensen & Agger, 2022; Lawless & Pearson, 2012).

Other variables examined in the literature include the potential benefit of vertical networks when deployed in the institutional spheres of the market (Deas & Doyle, 2013) since this is considered to be the most appropriate context from which to contain exclusion and curb vulnerability. The lack of business density is directly related to the neighborhood's reputation of a high level of vulnerability and to processes of neighborhood degradation (Antón-Alonso & Cruz-Gómez, 2022).

Success in undertaking vertical projects that destabilize processes of vulnerability lies in overcoming three types of institutional and personal barriers: discriminatory institutional expectations; the mismatch between the capacity of vulnerable populations in terms of education, social context, self-esteem, and the skills needed to develop such projects (Charnoz, 2018); and the perceived lack of trust in institutions.

## 5. Discussion and Conclusions

This article addresses the concept of urban vulnerability and provides an overview of the criteria used to measure and identify this reality within the EU. The method employed has been that of a systematic review of 190 articles extracted from the Web of Science and Scopus databases from 2002 to 2024. The official tools being used by European countries to understand and measure this type of vulnerability are also addressed.

Having completed the review, urban vulnerability is understood to be a circular process that begins with a situation of segregation in the metropolitan space that enters a self-perpetuating cycle (Andersen, 2002). This situation is further reinforced through a series of social and reputation mechanisms that interact (Almeida, 2021) and have a negative or discriminatory effect on the sociodemographic, economic, residential, and subjective urban fabric (Hernández Aja et al., 2015).

The study and detection of urban vulnerability at the European level have been addressed from three independent points of view. On the one hand, the need to identify the reality of urban vulnerability has led to the development of theoretical knowledge that seeks to define the concept in order to facilitate its detection. Such a need captures vulnerability in a specific space at a particular moment in time and helps to identify vulnerable areas. The data generated that catalogue urban vulnerability is classified as *Snapshots*.

However, urban vulnerability is not a static condition. There are precedents and multiple trajectories along a timeline that provide data beyond the present situation of vulnerability. The data that provides a more comprehensive view of urban vulnerability is classified as "dynamics."

Another approach to the research highlights psychosocial aspects of urban vulnerability requiring a more qualitative analysis of how this phenomenon is perceived. This research reports the failure of political intervention in dealing with the more subjective side of vulnerability. Given the complexity involved in doing so, this has either not been considered from an operational standpoint, or has been included in European indices in a way that has proved ineffective until now. The research calls for the need to identify the causal mechanisms that affect this intangible or latent factor.

According to the literature reviewed (see Table 2), policies that have tried to rectify vulnerability through an integral approach such as modifying the environment, housing, and/or population have failed since they seek to alter the symptoms of vulnerability without acting on the causes (Andersen, 2002; Bellet Sanfeliu, 2021). The scale of the problem and the complexity of the causes have complicated policy design and implementation. A multidimensional approach in response to the problem is required. The difficulties in defining the concept of urban vulnerability are directly related to the lack of a comprehensive theoretical vision that would serve as a basis for developing tools to accurately identify it and develop effective actions designed to eliminate it.

In short, to capture situations of urban vulnerability it is necessary to build a theoretical framework that connects the three approaches discussed in this study that can form the basis for in-depth research to obtain more adequate knowledge of urban vulnerability such as precedents, causes, symptoms, and observations of coping responses. Both the causal mechanisms and the factors that drive the dynamics involved need to be incorporated into official tools and procedures for measuring vulnerability to produce more effective snapshots.

Moreover, the psychosocial aspect should receive more attention, and its study reinforced through the use of qualitative methodologies to obtain more specific and complete information about the issues that neighborhoods must deal with. In this sense, it is essential that future work explores the question of causal mechanisms since there is evidence of a lack of specific indicators for measuring urban vulnerability. The findings indicate that it is essential to broaden the explanatory scope of the patterns that signal degradation or identify why high levels of urban vulnerability persist (García-Almirall et al., 2023; Visser, 2020). This approach paves the way for future research on this topic.

Finally, the literature calls for more data on the subjective dimension of urban vulnerability, yet the official information available presents the most deficient measurements. The subjective domain should be linked to causal mechanisms and dynamics of vulnerability. Capturing the social perspective of vulnerable groups is essential for a clearer understanding of the issues involved (Bektaş & Taşan-Kok, 2020; Ruiz, 2019; Van Dam & Raeymaeckers, 2017; Visser, 2020). Likewise, the study of community expectations and interpretations will also contribute important information. Once the criteria for assessing the relative status of vulnerability is established this will greatly facilitate research on the effects of neighborhood deprivation on psychosocial behavior (Alves, 2017; Nieuwenhuis et al., 2017). Interest in the subjective dimension has focused on objective characteristics such as the perception of physical features and feelings of safety, ignoring a wide range of factors mediated by subjectivity that influence the chronification of urban vulnerability. Social cohesion, neighborhood status, neighborhood choice, and stigmatization are all factors that influence the expectations and behavior of the most vulnerable residents (Miltenburg & Van de Werfhorst, 2017; Nieuwenhuis et al., 2017; Permentier et al., 2011; Van der Land & Doff, 2010; Visser, 2020). For this reason,

there is a growing need to carry out new research on this facet of urban vulnerability within the context of the European Union.

### Conflict of Interests

The author declares no conflict of interests.

### References

- Agence Nationale de la Cohésion des Territoires. (2022). *Atlas des quartiers prioritaires de la politique de la ville. Outil d'analyse et de comparaison des quartiers prioritaires et de leur environnement*. [https://sig.ville.gouv.fr/atlas/QP\\_r%C3%A9gions](https://sig.ville.gouv.fr/atlas/QP_r%C3%A9gions)
- Agger, A., & Jensen, O. J. (2015). Area-based initiatives—And their work in bonding, bridging and linking social capital. *European Planning Studies*, 23(10), 2045–2061. <https://doi.org/10.1080/09654313.2014.998172>
- Al Sader, N., Reinout Kleinhans, R., & Van Ham, M. (2019). Entrepreneurial citizenship in urban regeneration in the Netherlands. *Citizenship Studies*, 23(5), 442–459. <https://doi.org/10.1080/13621025.2019.1621266>
- Albeda, Y., Tersteeg, A., Oosterlynck, S., & Verschraegen, G. (2018). Symbolic boundary making in super-diverse deprived neighbourhoods. *Tijdschrift voor Economische en Sociale Geografie*, 109(4), 470–484. <https://doi.org/10.1111/tesg.12297>
- Alguacil Gómez, J., Camacho Gutiérrez, J., & Hernández Aja, A. (2014). La vulnerabilidad urbana en España. Identificación y evolución de los barrios vulnerables. *EMPIRIA, Revista de Metodología de Ciencias Sociales*, 27, 73–94. <https://doi.org/10.5944/empiria.27.2014.10863>
- Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.
- Almeida, D. (2021). The Republic's inner borders: Rethinking French *banlieues* through critical border studies. *Journal of Borderlands Studies*, 38(3), 377–396. <https://doi.org/10.1080/08865655.2021.1913066>
- Alves, S. (2017). Assessing the impact of area-based initiatives in deprived neighborhoods: The example of S. João de Deus in Porto, Portugal. *Journal of Urban Affairs*, 39(3), 381–399. <https://doi.org/10.1080/07352166.2016.1245081>
- Andersen, H. S. (2002). Excluded places: The interaction between segregation, urban decay and deprived neighbourhoods. *Housing, Theory and Society*, 19(3/4), 153–169. <https://doi.org/10.1080/140360902321122860>
- Andersen, H. S. (2010). Spatial assimilation in Denmark? Why do immigrants move to and from multi-ethnic neighbourhoods? *Housing Studies*, 25(3), 281–300. <https://doi.org/10.1080/02673031003711451>
- Anguelovski, I., Connolly, J. J. T., Masip, L., & Pearsall, H. (2018). Assessing green gentrification in historically disenfranchised neighborhoods: A longitudinal and spatial analysis of Barcelona. *Urban Geography*, 39(3), 458–491. <https://doi.org/10.1080/02723638.2017.1349987>
- Antón-Alonso, F., & Cruz-Gómez, I. (2022). La vulnerabilidad urbana en la metrópoli de Barcelona. El rol de la densidad institucional en su persistencia. *Revista Española de Investigaciones Sociológicas*, 178, 3–22. <https://doi.org/10.5477/cis/reis.178.3>
- Antón-Alonso, F., & Porcel, S. (2023). Las trayectorias de los barrios desfavorecidos. Relevancia de las condiciones de la vivienda e implicaciones para las políticas públicas. *OBETS. Revista de Ciencias Sociales*, 18(2), 239–258. <https://doi.org/10.14198/obets.22850>
- Bailey, N., van Gent, W. P. C., & Musterd, S. (2017). Remaking urban segregation: Processes of income sorting and neighbourhood change. *Population, Space and Place*, 23(3), Article 2013. <https://doi.org/10.1002/psp.2013>
- Baumont, C., & Guillain, R. (2016). Les enjeux des politiques publiques zonées. *Revue économique*, 67(3), 391–414. <http://www.jstor.org/stable/43783144>



- Bektaş, Y., & Taşan-Kok, T. (2020). Love thy neighbor? Remnants of the social-mix policy in the Kolenkit neighborhood, Amsterdam. *Journal of Housing and the Built Environment*, 35, 743–761. <https://doi.org/10.1007/s10901-020-09729-5>
- Bellet Sanfeliu, C. (2021). La producción de un barrio desfavorecido en los márgenes de una ciudad media. *Scripta Nova*, 25(2), 75–103. <https://doi.org/10.1344/sn2021.25.32421>
- Blumer, H. (1958). Race prejudice as a sense of group position. *Pacific Sociological Review*, 1(1). <https://doi.org/10.2307/1388607>
- Bobo, L., & Hutchings, V. L. (1996). Perceptions of racial group competition: Extending Blumer's theory of group position to a multiracial social context. *American Sociological Review*, 61(6), 951–972. <https://doi.org/10.2307/2096302>
- Boje-Kovacs, B., Egsgaard-Pedersen, A., & Weatherall, C. D. (2021). Residential mobility and persistent neighborhood deprivation. *Journal of Housing Economics*, 53, Article 101771. <https://doi.org/10.1016/j.jhe.2021.101771>
- Boldú Hernández, J., & Domínguez-Mujica, J. (2018). Envejecimiento demográfico y exclusión social en barrios obreros degradados de Las Palmas de Gran Canaria. *Estudios Geográficos*, 79(285), 469–500. <https://doi.org/10.3989/estgeogr.201818>
- Bunel, M., L'Horty, Y., & Petit, P. (2016). Discrimination based on place of residence and access to employment. *Urban Studies*, 53(2), 267–286. <https://www.jstor.org/stable/26146248>
- Carlsson, M., Reshid, A. A., & Rooth, D. O. (2018). Neighborhood signaling effects, commuting time, and employment: Evidence from a field experiment. *International Journal of Manpower*, 4, 534–549. <https://doi.org/10.1108/IJM09-2017-0234>
- Castel, R. (1995). *Les métamorphoses de la question sociale: Une chronique du salariat*. Fayard.
- CATI-GE, Université de Genève, & Haute école de gestion de la HES-SO Genève. (2020). *Analyse des inégalités dans le canton de Genève dans le cadre de la Politique de cohésion sociale en milieu urbain* (Rapport 2020). <https://www.ge.ch/document/rapport-2020-du-centre-analyse-territoriale-inegalites-geneve-cati-ge>
- Charnoz, P. (2018). Do enterprise zones help residents? Evidence from France. *Annals of Economics and Statistics*, 130, 199–225. <https://doi.org/10.15609/annaeconstat2009.130.0199>
- Clark, K., & Drinkwater, S. (2002). Enclaves, neighbourhood effects and employment outcomes: Ethnic minorities in England and Wales. *Journal of Population Economics*, 15(1), 5–29. <https://doi.org/10.1007/PL00003839>
- Commission of the European Communities. (1997). *Towards an urban agenda in the European Union*.
- Commission of the European Communities. (2000). *The urban audit—Vols. I, II y III*. European Communities.
- Conway, M., & Konvitz, J. (2000). Meeting the challenge of distressed urban areas. *Urban Studies*, 37(4), 749–774. <http://www.jstor.org/stable/43198171>
- Costa Pinho, T. (2000, June 26–30). *Residential contexts of social exclusion: Images and identities* [Paper presentation]. ENHR Conference Housing in the 21st Century: Fragmentation and Reorientation, Gävle, Sweden.
- Council of the European Union. (2008). *Marseille Declaration adopted at the Informal Council of Ministers responsible for urban development held in Marseille on 25 November 2008*.
- Dacombe, R. (2013). Sports clubs and civic inclusion: Rethinking the poverty of association. *Sport in Society*, 16(10), 1263–1278. <https://doi.org/10.1080/17430437.2013.821252>
- Davidson, G., McGuinness, D., Greenhalgh, P., Braidford, P., & Robinson, F. (2013). 'It'll get worse before it gets better': Local experiences of living in a regeneration area. *Journal of Urban Regeneration and Renewal*, 7(1), 55–66. <https://doi.org/10.69554/WREP1300>

- Deas, I., & Doyle, J. (2013). Building community capacity under 'austerity urbanism': Stimulating, supporting and maintaining resident engagement in neighbourhood regeneration in Manchester. *Journal of Urban Regeneration & Renewal*, 6(4), 365–380.
- Echebarria, C., Aguado-Moralejo, I., & Barrutia, J. M. (2023). Analyzing spatial vulnerability in cities by combining the analytic hierarchy process and geographic information systems: The case of Vitoria-Gasteiz, Spain. *Journal of Urban Affairs*. Advance online publication. <https://doi.org/10.1080/07352166.2023.2226875>
- European Commission. (2016). *Urban agenda for the EU—Pact of Amsterdam*. [https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://ec.europa.eu/regional\\_policy/sources/policy/themes/urban-development/agenda/pact-of-amsterdam.pdf](https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://ec.europa.eu/regional_policy/sources/policy/themes/urban-development/agenda/pact-of-amsterdam.pdf)
- European Commission. (2020). *New Leipzig Charter*.
- Eurostat. (2013). *European Union's statistics on income and living conditions (EU-SILC) survey. Ad-hoc module on subjective well-being*. Eurostat. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\\_statistics\\_on\\_income\\_and\\_living\\_conditions\\_\(EU-SILC\)\\_methodology\\_-\\_2013\\_personal\\_well-being\\_indicators](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology_-_2013_personal_well-being_indicators)
- Falahat, S., & Madanipour, A. (2019). Lifeworld and social space. Spatial restructuring and urban governance in Berlin. *The Planning Review*, 55(4), 46–59. <https://doi.org/10.1080/02513625.2019.1708071>
- Fransham, M. (2019). Income and population dynamics in deprived neighbourhoods: Measuring the poverty turnover rate using administrative data. *Applied Spatial Analysis and Policy*, 12, 275–300. <https://doi.org/10.1007/s12061-017-9242-6>
- Galster, G. C. (2012). The mechanism(s) of neighbourhood effects: Theory, evidence, and policy implications. In M. Van Ham, D. Manley, & N. Bailey (Eds.), *Neighbourhood effects research: New perspectives* (pp. 23–56). Springer.
- García-Almirall, P., Cornadó, C., Piasek, G., & Vima Grau, S. (2023). Review of socio-residential vulnerability identification methodologies. Application to the cities of Bilbao and Barcelona. *VITRUVIO—International Journal of Architectural Technology and Sustainability*, 8(1), 70–83. <https://doi.org/10.4995/vitruvio-ijats.2023.19477>
- García-Araque, J., & García-Cuesta, J. L. (2020). Vulnerabilidad urbana desapercibida e incertidumbre de los métodos estadísticos de identificación. *Papeles de población*, 26(106), 221–260. <https://doi.org/10.22185/24487147.2020.106.37>
- Giddens, A. (1984). *The constitution of society*. Polity Press.
- Gobillon, L., Magnac, T., & Selod, H. (2011). The effect of location on finding a job in the Paris region. *Journal of Applied Econometrics*, 26(7), 1079–1112. <https://doi.org/10.1002/jae.1168>
- Government of Denmark. (2024, July 20). *The ghetto list—Definition of a ghetto*. <https://www.regeringen.dk/nyheder/2017/ghetto-listen-2017-to-nye-omraader-tilfoejet-femfjernet/ghettolisten-definition-af-en-ghetto>
- Hellerstein, J. K., & Neumark, D. (2012). Employment in black urban labor markets: Problems and solutions. In P. N. Jefferson (Ed.), *The Oxford handbook of the economics of poverty* (pp. 164–202). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195393781.013.0007>
- Hernández Aja, A. (2007). Áreas vulnerables en el centro de Madrid. *Cuadernos de Investigación Urbanística*, 53.
- Hernández Aja, A., Matesanz Parellada, A., & García Madruga, C. (Ed.). (2015). *Atlas de barrios vulnerables de España*. Instituto Juan de Herrera.
- Hickman, P. (2012). "Third places" and social interaction in deprived neighbourhoods in Great Britain. *Journal of Housing and the Built Environment*, 28(2), 221–236. <http://www.jstor.org/stable/42636241>

- Hill, J. M., Jobling, R., Pollet, T. V., & Nettle, D. (2014). Social capital across urban neighborhoods: A comparison of self-report and observational data. *Evolutionary Behavioral Sciences*, 8(2), 59–69. <https://doi.org/10.1037/h0099131>
- Holden, J., & Frankal, B. (2012). New perspective on the success of public sector worklessness interventions in the UK's most deprived areas. *Local Economy: The Journal of the Local Economy Policy Unit*, 27(5/6), 610–619. <https://doi.org/10.1177/0269094212449114>
- Honneth, A. (2007). Recognition as ideology. In B. Van den Brink & D. Owen (Eds), *Recognition and power* (pp. 323–347). Cambridge University Press.
- Hughes, C., & Lupton, R. (2021). Understanding inclusive growth at local level: Changing patterns and types of neighbourhood disadvantage in three English city-regions. *Cambridge Journal of Regions, Economy and Society*, 14(1), 141–156. <https://doi.org/10.1093/cjres/rsaa035>
- Istat. (2020). *Le misure della vulnerabilità: Un'applicazione a diversi ambiti territoriali*. <https://www.istat.it/it/archivio/251008>
- Jensen, J. O., & Agger, A. (2022). Voluntarism in urban regeneration: Civic, charity or hybrid? Experiences from Danish area-based interventions. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 33(2), 297–307. <https://doi.org/10.1007/s11266-020-00297-4>
- Jivraj, S., & Alao, C. (2023). Are ethnic employment penalties mitigated in deprived neighbourhoods and in ethnically dense neighbourhoods? *Population, Space and Place*, 29(3), Article 2646. <https://doi.org/10.1002/psp.2646>
- Kitchenham, B. (2004). *Procedures for performing systematic reviews* (Report TR/SE-0401). Keele University. <https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.inf.ufsc.br/~aldo.vw/kitchenham.pdf>
- L'Horty, Y., Mathieu Bunel, M., & Petit, P. (2019). Testing for redlining in the labour market. *Spatial Economic Analysis*, 14(2), 153–173. <https://doi.org/10.1080/17421772.2019.1559347>
- Laparra, M., & Pérez Eransus, B. (2008). *La exclusión social en España: Un espacio diverso y disperso en intensa transformación*. FOESSA.
- Lawless, P., & Pearson, S. (2012). Outcomes from community engagement in urban regeneration: Evidence from England's new deal for communities programme. *Planning Theory & Practice*, 13(4), 509–527. <https://doi.org/10.1080/14649357.2012.728003>
- Li, Y., Pickles, A., & Savage, M. (2005). Social capital and social trust in Britain. *European Sociological Review*, 21(2), 109–123. <https://doi.org/10.1093/esr/jci007>
- Lisboa Câmara Municipal. (2020). *Portugal 2020: Por Lisboa 2014–2020. PAICDLx: Plano de acção integrado para comunidades desfavorecidas do Município de Lisboa*. [https://www.lisboa.pt/fileadmin/porta/temas/urbanismo/reabilitacao\\_urbana/PEDU/PAICD\\_Relatorio.pdf](https://www.lisboa.pt/fileadmin/porta/temas/urbanismo/reabilitacao_urbana/PEDU/PAICD_Relatorio.pdf)
- Madanipour, A. (2004). Marginal public spaces in European cities. *Journal of Urban Design*, 9(3), 267–286. <https://doi.org/10.1080/1357480042000283869>
- Mandemakers, J., Leidelmeijer, K., Burema, F., Halbersma, R., Middeldorp, M., & Veldkamp, J. (2021). *Leefbaarometer 3.0–Instrumentontwikkeling* (Report). Atlas Research. <https://atlasresearch.nl/leefbaarometer-3-0-instrumentontwikkeling>
- McCulloch, A. (2001). Ward-level deprivation and individual social and economic outcomes in the British household panel survey. *Environment and Planning A: Economy and Space*, 33(4), 667–684. <https://doi.org/10.1068/a33205>
- McGuinness, D., Greenhalgh, P., Davidson, G., Robinson, F., & Braidford, P. (2012). Swimming against the tide: A study of a neighbourhood trying to rediscover its 'reason for being'—The case of South Bank, Redcar and Cleveland. *Local Economy*, 27(3), 251–264. <https://doi.org/10.1177/0269094211434492>

- Mclennan, D., Noble, S., Noble, M., Plunkett, E., Wright, G., & Gutacker, N. (2019). *The English indices of deprivation 2019: Technical report*. Ministry of Housing, Communities and Local Government. [https://assets.publishing.service.gov.uk/media/5d8b387740f0b609909b5908/loD2019\\_Technical\\_Report.pdf](https://assets.publishing.service.gov.uk/media/5d8b387740f0b609909b5908/loD2019_Technical_Report.pdf)
- Miltenburg, E. M., & Van de Werfhorst, H. G. (2017). Finding a job: The role of the neighbourhood for different household configurations over the life course. *European Sociological Review*, 33(1), 30–45. <https://doi.org/10.1093/esr/jcw045>
- MITMA, & Agenda Urbana. (2021). *Atlas de la vulnerabilidad urbana en España 2001 y 2011: Metodología, contenidos y créditos*. <https://atlasvulnerabilidadurbana.mitma.es>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), Article 1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Nieuwenhuis, J., van Ham, M., Yu, R., Branje, S., Meeus, W., & Hooimeijer, P. (2017). Being poorer than the rest of the neighborhood: Relative deprivation and problem behavior of youth. *Journal of Youth and Adolescence*, 46, 1891–1904. <https://doi.org/10.1007/s10964-017-0668-6>
- Northern Ireland Statistics and Research Agency. (2017). *NI multiple deprivation measure 2017: Blueprint document*.
- Oberwittler, D. (2007). The effects of neighbourhood poverty on adolescent problem behaviours: A multi-level analysis differentiated by gender and ethnicity. *Housing Studies*, 22(5), 781–803. <https://doi.org/10.1080/02673030701474727>
- Parés, M., Bonet-Martí, J., & Martí-Costa, M. (2012). Does participation really matter in urban regeneration policies? Exploring governance networks in Catalonia (Spain). *Urban Affairs Review*, 48(2), 238–271. <https://doi.org/10.1177/1078087411423352>
- Park, R. E. (1915). The city: Suggestion for the investigation of human behavior in the urban environment. *American Journal of Sociology*, 20, 557–612. <https://doi.org/10.7208/9780226636641-003>
- Pérez de Armiño, K. (2000). Vulnerabilidad. In K. Pérez de Armiño (Ed.), *Diccionario de acción humanitaria y cooperación al desarrollo* (pp. 1–13). Universidad del País Vasco. <https://www.dicc.hegoa.ehu.eus>
- Permentier, M., Bolt, G., & Van Ham, M. (2011). Determinants of neighbourhood satisfaction and perception of neighbourhood reputation. *Urban Studies*, 48(5), 977–996. <https://doi.org/10.1177/0042098010367860>
- Peters, S., Finney, N., & Kapadia, D. (2018). How is the benefit of mixed social networks altered by neighbourhood deprivation for ethnic groups? *Journal of Ethnic and Migration Studies*, 45(17), 3283–3300. <https://doi.org/10.1080/1369183X.2018.1481002>
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65–85. <https://doi.org/10.1146/annurev.psych.49.1.65>
- Piasek, G., Fernández Aragón, I., Shershneva, J., & Garcia-Almirall, P. (2022). Assessment of urban neighbourhoods' vulnerability through an Integrated Vulnerability Index (IVI): Evidence from Barcelona, Spain. *Social Sciences*, 11(10), Article 476. <https://doi.org/10.3390/socsci11100476>
- Pobal Government Supporting Communities. (2022). *Pobal HP Deprivation Index 2022* (Briefing Note). <https://www.pobal.ie/pobal-hp-deprivation-index>
- Robson, B., Lymperopoulou, K., & Rae, A. (2008). People on the move: Exploring the functional roles of deprived neighbourhoods. *Environment and Planning A: Economy and Space*, 40(11), 2693–2714. <https://doi.org/10.1068/a40241>
- Ruiz, A. (2019). El potencial de la percepción social aplicada al análisis de la vulnerabilidad en planificación urbana. *Eure*, 45(136), 31–50. <http://doi.org/10.4067/S0250-71612019000300031>
- Sassen, S. (2001). *The global city: New York, London, Tokyo*. Princeton University Press.

- Schnur, O. (2005). Exploring social capital an urban neighbourhood resource: Empirical findings and strategic conclusions of a case study in Berlin-Moabit. *Tijdschrift voor Economische en Sociale Geografie*, 96(5), 488–505. <https://doi.org/10.1111/j.1467-9663.2005.00481.x>
- Scottish Government. (2024, July 20). *Scottish Index of Multiple Deprivation 2020v2—Indicators*. <https://www.gov.scot/publications/scottish-index-of-multiple-deprivation-2020v2-indicator-data/>
- Senatsverwaltung für Stadtentwicklung und Wohnen. (2019). *Monitoring soziale stadtentwicklung (MSS) berlin: Erläuterungen zu den indikatoren und indizes zum MSS 2019—“indikatorenblätter” 2*.
- Simmel, G. (1972). *Georg Simmel on individual and social forms*. University Chicago Press.
- Valdés Gázquez, M. (2021). Vulnerabilidad social, genealogía del concepto. *Gazeta de Antropología*, 37(1).
- Van Dam, S., & Raeymaeckers, P. (2017). Migrants in the periphery: Migrant organisations and their networks. *European Journal of Social Work*, 20(6), 921–934. <https://doi.org/10.1080/13691457.2016.1202810>
- Van der Land, M., & Doff, W. (2010). Voice, exit and efficacy: Dealing with perceived neighbourhood decline without moving out. *Journal of Housing and the Built Environment*, 25(4), 429–445. <https://doi.org/10.1007/s10901-010-9197-2>
- Van Ham, M., Manley, D., Bailey, N., Simpson, L., & Maclennan, D. (2013). Understanding neighbourhood dynamics: New insights for neighbourhood effects research. In M. Van Ham, D. Manley, N. Bailey, L. Simpson, & D. Maclennan (Eds.), *Understanding neighbourhood dynamics: New insights for neighbourhood effects research* (pp. 1–21). Springer.
- Van Laner, S. (2021). Sense of place as spatial control: Austerity and place processes among young people in Ballymun, Dublin. In T. Banini & O. R. Ilovan (Eds.), *Representing place and territorial identities in Europe* (Vol. 127, pp. 97–109). Springer. [https://doi.org/10.1007/978-3-030-66766-5\\_7](https://doi.org/10.1007/978-3-030-66766-5_7)
- Van Ommeren, J., & Gutiérrez-i-Puigarnau, E. (2011). Are workers with a long commute less productive? An empirical analysis of absenteeism. *Regional Science and Urban Economics*, 41, 1–8. <https://doi.org/10.1016/j.regsciurbeco.2010.07.005>
- Vandermotten, C., Marissal, P., Van Hamme, G., Kesteloot, C., Slegers, K., Vanden Broucke, L., & Naiken, R. (2015). *Analyse dynamique des quartiers en difficulté dans les régions urbaines belges*.
- Visser, K. (2020). “I really wanted to stay in the same neighbourhood...”: Neighbourhood choice and satisfaction in the context of forced relocation—Young people’s perspectives. *Journal of Housing and the Built Environment*, 35, 443–460. <https://doi.org/10.1007/s10901-019-09702-x>
- Visser, K., Bolt, G., & Van Kempen, R. (2015). A good place to raise your children? The diversity of parents’ neighbourhood perceptions and parenting practices in a low-income, multi-ethnic neighbourhood: A case study in Rotterdam. *Geoforum*, 64, 112–120. <https://doi.org/10.1016/j.geoforum.2015.06.011>
- Welsh Government. (2024, July 20). *Welsh Index of Multiple Deprivation Indicator data from 2019*. Stats Welsh. <https://statswales.gov.wales/Catalogue/Community-Safety-and-Social-Inclusion/Welsh-Index-of-Multiple-Deprivation/WIMD-Indicator-data-2019>
- Wirth, L. (1938). Urbanism as a way of life. *The American Journal of Sociology*, 44(1), 1–24. <https://doi.org/10.1177/004912417200100203>
- World Bank. (2014). *Elaboration of integration strategies for urban marginalized communities. The atlas of urban marginalized areas in Romania*.
- Zuccotti, C. V. (2019). Ethnicity and neighbourhood attainment in England and Wales: A study of second generations’ spatial integration. *Population, Space and Place*, 25(7), Article 2252. <https://doi.org/10.1002/psp.202252>



### About the Author



**Maria Belén Vázquez Brage** graduated in sociology (University of Coruña in 2002) and psychology (UNED in 2010). She is a professor at the University School of Labor Relations of Coruña and a PhD student in the Social and Behavioral Sciences program at the University of Coruña. She is also a member of the Territorial Studies research group in the subject of urban sociology.